

Remarks

The applicant respectfully requests entry of the amendment, and reconsideration and allowance of the captioned application. Independent claim 1 and dependent claims 2-10 are pending. Claim 1 is amended. No new matter is added.

The Office Action objects to the abstract because it was too long. The abstract is amended accordingly.

The Office Action objects to claim 1 because “intermediate region” was introduced with a definite article. The claim is clarified by amending “transition region” to “intermediate region.” The same region was inadvertently referred to by both terms interchangeably, and the amendment eliminates that confusion.

The Office Action rejects claims 1-8 as being anticipated by Siimes. It rejects claims 9 and 10 as being rendered obvious by Siimes. The applicant respectfully traverses the rejections.

Independent claim 1 requires a plug with a tapered cylindrical shape. The Office Action refers to the Siimes insert 20 as the claimed plug, and refers to the Siimes Figure 1 and specifically to locking barb 38 in connection with the plug having a tapered cylindrical shape. However, locking barb 38 is not on the insert 20 but extends from the inner surface 18 of cavity 16 defined by member 12. (¶23, lines 12-15). Indeed, Siimes teaches away from a tapered plug, because it specifically teaches a symmetrical insert to simplify assembly. (“Further, the concave openings 30 are disposed on each end of the insert 20 to simplify orientation and assembly of the insert 20 to the cavity 16.” (¶21, lines 11-13)).

Perhaps the Office Action relies on the appearance in the Siimes Figure 1 that the locking barb 38 deforms a portion of the surface of insert 20. However, assuming *arguendo* that the deformed portion of the surface of insert 20 disclosed the claimed tapered cylindrical shape, Siimes still would not disclose the claimed maximum cross-section (of the tapered cylindrical shape) that is greater than the body plug region open cross-section. The Office Action refers to the Siimes Figure 1, but the enlarged view of Figure 2 shows that the inner surface 18 and locking barb 38 never deform insert 20 to create a cross-section that is greater than the open cross-section of cavity 16. Indeed, even if the Siimes Figure 1 were interpreted as allegedly showing that locking barb 38 had somehow deformed insert 20 to expand its cross-section into a recess that locking barb 38 appears (in Figure 1 and not in enlarged Figure 2) to create in inner surface 18, that recess itself would constitute a larger open cross-section of cavity 16 – so Siimes still would not disclose the claimed maximum cross-section (of the tapered cylindrical shape) that is greater than the body plug region open cross-section.

Furthermore, the claim requires a frangible disk being sandwiched between a plug disk face and a body radial wall, and it requires the plug disk face to be defined at an end (of the plug) adjacent the minimum cross-section (of the tapered cylindrical shape). If the deformed portion of the Siimes insert 20 is supposed to disclose the tapered cylindrical shape, then the minimum cross-section of the tapered cylindrical shape is not adjacent an end of the plug. If any surface created by the deformation of the Siimes insert 20 were characterized as constituting a plug disk face, it would not sandwich the Siimes frangible member 24.

For the above reasons, Siimes does not anticipate independent claim 1. The dependent claims are allowable at least because they depend from claim 1, in addition to other reasons such as:

Claim 8 requires, *inter alia*, the plug region to have a constant open cross-section. However, the Siimes locking barb 38 extends from the inner surface 18 of cavity 16, thereby varying the open cross-section of cavity 16. Therefore, the claim 8 limitations are not disclosed by Siimes.

The Office Action erroneously asserts that the 1-5 degree and 2 degree angle of taper required by claims 9 and 10, respectively, would have been obvious because (1) it would be an obvious design choice to taper the Siimes insert at those angles, or (2) it would be expected that the applicant's invention would perform equally well with the "tapered cylindrical shape of Siimes et al., because the tapered cylindrical shape of Siimes et al. ensure easy insertion of the plug." To the contrary, (1) Siimes teaches away from a tapered plug as discussed above, and (2) what the Office Action considers the "tapered" shape of the Siimes insert is at most a deformation that does not ensure easy insertion but is designed specifically to prevent removal without destruction. Indeed, a 5 degree deformation is likely insufficient for the purposes of the Siimes invention. It is more likely that Siimes suggests a deformation of at least 20 degrees to prevent removal of the Siimes insert, and would not render obvious the limitations of claims 9 and 10.

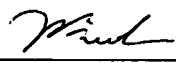
The applicant submits that the claims are in condition for allowance, and requests entry of the amendment, and reconsideration and allowance. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the application,

the applicant requests the Examiner to call the undersigned at the below-listed telephone number.

Respectfully submitted,

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